

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A sputtering target, comprising a copper alloy sputtering target containing 0.5 to 4.0wt% of Al, 5wtppm or less of oxygen, and 0.01wtppm to 0.5wtppm or less of Si, and having an average crystal grain size of 0.1 to 60 μ m, and an average grain size variation of within $\pm 20\%$.

Claim 2 (currently amended): A copper alloy sputtering target according to claim 1, wherein said target further contains one or more selected from among Sb, Zr, Ti, Cr, Ag, Au, Cd, In and As in a total amount of ~~1.0ppm~~ 1.0wtppm or less.

Claim 3 (currently amended): A copper alloy sputtering target according to claim 1, wherein said target further contains one or more selected from among Sb, Zr, Ti, Cr, Ag, Au, Cd, In and As in a total amount of ~~0.5ppm~~ 0.5wtppm or less.

Claims 4-14 (canceled).

Claim 15 (previously presented): A copper alloy sputtering target according to claim 3, wherein a recrystallization temperature of said target is 365°C or less.

Claim 16 (previously presented): A copper alloy sputtering target according to claim 15, wherein said target contains 1wtppm or less of oxygen.

Claim 17 (currently amended): A copper alloy sputtering target according to claim 16, wherein said target contains Al and Sn in a total amount of 0.5 to 4.0wt% of Sn.

Claim 18 (previously presented): A copper alloy sputtering target according to claim 1, wherein a recrystallization temperature of said target is 365°C or less.

Claim 19 (canceled).

Claim 20 (currently amended): A copper alloy sputtering target according to claim 1, wherein said target contains Al and Sn in a total amount of 0.5 to 4.0wt% of Sn.

Claims 21-25 (canceled).

Claim 26 (withdrawn): Semiconductor element wiring prepared by a process comprising the step of forming the semiconductor element wiring from [a] the copper alloy sputtering target containing 0.5 to 4.0wt% of Al or Sn and 0.5wtppm or less of Si or Mn and having an average crystal grain size of 0.1 to 60 μ m and an average grain size variation of within \pm 20% according to claim 1.

Claim 27 (withdrawn): Semiconductor element wiring according to claim 26, wherein said semiconductor element wiring is a semiconductor wiring seed layer.

Claim 28 (withdrawn): Semiconductor element wiring according to claim 27, wherein said semiconductor wiring seed layer is formed on a barrier film of Ta, Ta alloy, or a nitride thereof.

Claim 29 (new): A copper alloy sputtering target according to claim 1, wherein said content of Si in said target is 0.19wtppm to 0.41wtppm.

Claim 30 (new): A copper alloy sputtering target for forming wiring of a semiconductor element, consisting of copper, 0.5 to 4.0wt% of Al, 5wtppm or less of oxygen, and an amount of Si to improve oxidation resistance, said amount of Si not exceeding 0.5wtppm, and said target having an average crystal grain size of 0.1 to 60 μ m and an average grain size variation of within \pm 20%.

Claim 31 (new): A copper alloy sputtering target according to claim 30, wherein said amount of Si is 0.19wtppm to 0.41wtppm.

Claim 32 (new): A copper alloy sputtering target according to claim 30, wherein said copper is high purity copper having a purity of 6N (99.9999%) or higher.

Claim 33 (new): A copper alloy sputtering target for forming wiring of a semiconductor element, consisting of copper, 0.5 to 4.0wt% of Al, 5wtppm or less of oxygen, one or more selected from among Sb, Zr, Ti, Cr, Ag, Au, Cd, In and As in a total amount of 1.0wtppm or less, and an amount of Si to improve oxidation resistance, said amount of Si not exceeding 0.5wtppm,

and said target having an average crystal grain size of 0.1 to 60 μ m and an average grain size variation of within $\pm 20\%$.

Claim 34 (new): A copper alloy sputtering target according to claim 33, wherein said total amount of one or more selected from among Sb, Zr, Ti, Cr, Ag, Au, Cd, In and As is 0.24wtppm to 0.44wtppm.

Claim 35 (new): A copper alloy sputtering target according to claim 34, wherein said amount of Si is 0.19wtppm to 0.41wtppm.

Claim 36 (new): A copper alloy sputtering target according to claim 35, wherein said copper is high purity copper having a purity of 6N (99.9999%) or higher.